

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-102189

(43)Date of publication of application : 23.04.1993

(51)Int.Cl. H01L 21/336
H01L 29/784
C23C 14/26
C30B 25/14
H01L 21/205

(21)Application number : 04-023986

(71)Applicant : FUJITSU LTD

(22)Date of filing : 10.02.1992

(72)Inventor : MATSUMOTO TOMOTAKA
INOUE ATSUSHI
ICHIMURA TERUHIKO
MURATA YUJI
WATABE JUNICHI
NAGAIHIRO NORIO
HODATE MARI
OKI KENICHI
OKABE MASAHIRO

(30)Priority

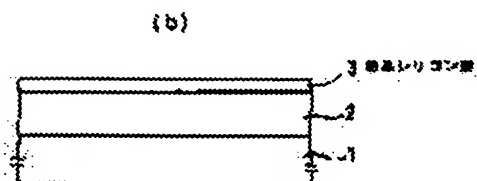
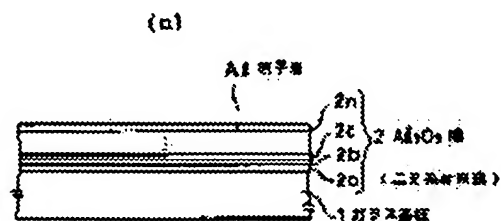
Priority number : 03202088 Priority date : 13.08.1991 Priority country : JP

(54) FORMATION METHOD OF THIN FILM, SILICON THIN FILM AND FORMATION METHOD OF SILICON THIN-FILM TRANSISTOR

(57)Abstract:

PURPOSE: To obtain a silicon thin film whose crystallinity at a low temperature is good by a method wherein a binary material film is grown on a substrate and, in succession, the silicon film is grown on the binary material film by an atomic-layer deposition method wherein the substrate is exposed alternately to two atmospheres which separately contain individual atoms constituting a binary material.

CONSTITUTION: By using an atomic-layer deposition method wherein a substrate 1 is exposed alternately to two atmospheres which contain individual atoms constituting a binary material, a binary material film 2 is grown on the substrate 1, and, in succession, a silicon film 3 is grown on the binary material film 2. Thereby, it is possible to obtain the silicon film whose crystallinity is good.



LEGAL STATUS

[Date of request for examination] 10.02.1992

[Date of sending the examiner's decision of rejection] 17.10.1995

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 2828152

[Date of registration] 18.09.1998